phenamin to be followed again with mercury. Later I use the bismuth compound and try to keep in touch with the patient until a cure is effected. Wassermann tests should be made every six months for the next three years, and subsequent treatment given according to the laboratory findings.

The most perfect of health boards is powerless until its functions are set in motion by the family physician. Protection from contagious disease presumes the ability to recognize contagious disease. If the physician whose aid is sought be ignorant or a quack, the whole community is endangered through his failure to make a correct diagnosis. This is the basic reason for the practice of medicine. Protection of the ignorant from exploitation is of but secondary importance; the credulous will ever find means for their own undoing. Outside the realm of communicable disease the average man has little concern with the medical fads of his neighbor. If he have lumbago he may go to a Turkish bath, or to a psychoanalyst, or to a physician, and it is no one's business but his own. Yet if his child have diphtheria it is the vital concern of the whole neighborhood that other children be kept out of the house. But diagnosis of diphtheria is a matter of medical education. It is not inherited nor acquired by occult means. The state doubts the ability of uneducated men who have taken a few lectures, or a correspondence course, when it comes to the public question of recognizing cases of communicable diseases. The concern of the public is not whether an excess of huckleberry pie is best cured by adjusting the fourteenth dorsal vertebra or by a dose of castor oil; its concern is whether Doctor Quack, the renowned healer, knows a case of measles when he sees it.—New York Times.

The onlooker can see a great deal of the game. And I, for instance, though I claim no insight into pure science, can fairly claim an onlooker's experience of very many practical instances of science as applied to the needs of our civilization today. For some years past, in war and in peace, I have been privileged to have countless opportunities of examining at close quarters the concrete results of such applied science. In things military and naval, in factories, workshops, mines, railroads, in contact with the everyday problems of education, health, land-settlement, agriculture, transport or housing—in all such varied departments of human life, it has been borne in on me more and more that if civilization is to go on, it can only progress along a road of which the foundations have been laid by scientific thought and research. More than that, I have come to realize that the future solution of practically all the domestic and social difficulties with which we have to grapple nowadays will only be found by scientific methods.—From the presidential address of the Prince of Wales, British Association for the Advancement of Science, Science, August, 1926.

At a medical meeting in Wisconsin, following a discussion on periodic examination of apparently healthy persons, it was asked how many physicians present had been examined within the past year. Three of the seventy present raised their hands. It was pointed out that hardly a month passes but that some physician, dear to his friends and apparently in the prime of his life, suddenly drops from the ranks, and oftentimes from a purely preventable disease. It does not look well for medical men to urge periodic examinations of the apparently healthy when they themselves do not follow the advice given.—J. Indiana M. A., August, 1926.

It is not only in the works of fiction and of the imagination that one need look for drama, but the thread of romance can be traced now running bright, now less bright throughout every aspect of the all-absorbing study of man. That the mysteries of the human body form no exception to this rule is readily seen in the fact that from time immemorial it has been the aim of the student and the investigator to fathom the hidden things, and even down to our own times the revelations they uncover partake of the spectacular, nay almost of the unreal.—John B. Deaver, J. Iowa M. Soc., August, 1926.

CLINICAL NOTES, CASE REPORTS AND NEW INSTRUMENTS

REPORT OF A CASE OF URTICARIA PIGMENTOSA IN A YOUNG ADULT

By MERLIN T-R. MAYNARD *

Urticaria pigmentosa is rare, and in adults is rare enough to justify an individual case report. About 150 such cases have been reported during the past forty years. These patients always arouse interest, and in view of the distinct character of the disease competent dermatologists rarely fail to make the diagnosis.

The gross lesions are those of pigmented macules or papules or mixed lesions which on irritation respond with an urticaria-like reaction of itching and weal formation. The macules may or may not be the result of an initial nonpigmented lesion, but pigmentation, however, rapidly develops, rarely fades, and the response to irritation is not lost even in old lesions. Distribution is largely on the flexural surfaces; the face, palms, and soles are rarely involved. The normal skin likewise often produces a dermographism. A biopsy shows typical features not found in chronic pigmented urticarial lesions and which, therefore, differentiate this disease from the not infrequent chronic form of urticaria.

Nettleship reported the first case of urticaria pigmentosa in 1869. His patient was a female child of 2 years, and his paper was entitled "Chronic Urticaria Leaving Brown Stains of Nearly Two Years' Duration." Unna later demonstrated mast cells in increased numbers in urticarias of the Nettleship type, and this established our present basis of classification. However, there are reports of clinically typical instances of the diseases without mast cells, and since mast cells occur in various conditions it is possible that their presence in urticaria pigmentosa may be a usual but not a necessary characteristic. It would seem, therefore, with typical symptoms and an otherwise consistent microscopic picture that, regardless of mast cells, a positive diagnosis is justifiable. However, repeated biopsies should be made because clinical phases and seasonal changes may shed new light on the occurrence or lack of occurrence of these cells.

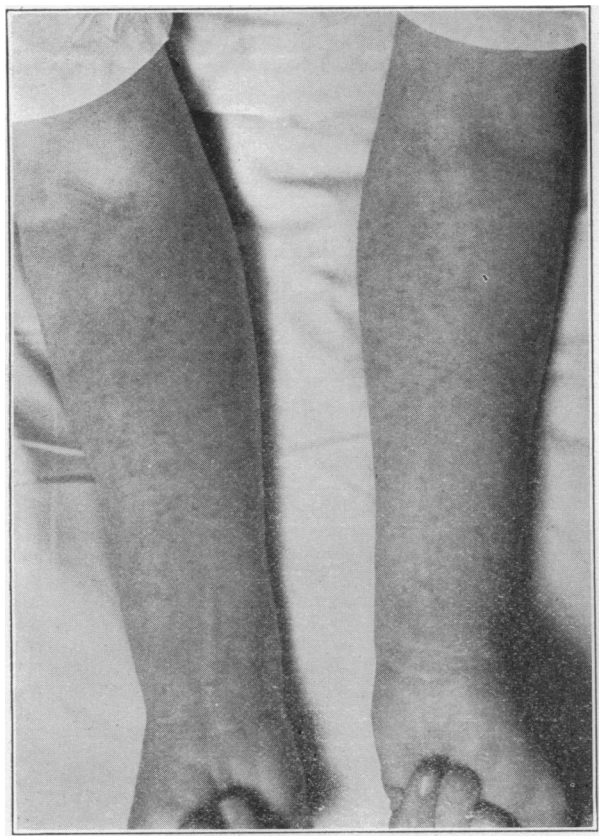
As published case reports are very complete, and the diagnostic features and histopathology often repeated in the literature, their further review except as will be brought out in the discussion of my case is not essential.

CASE REPORT

Helen S., Italian housewife, 29, examined in 1923, and the diagnosis of urticaria pigmentosa made on the clinical appearance. The patient did not return, but was traced and returned at my request in January, 1926. The skin condition as far as I could remember was unchanged. The history given was that of onset at the age of 20. The initial lesions beginning on the left wrist on the flexur surface, as several hive-like spots, following the rough grasping of the wrist by a schoolmate. These did not subside, but became rapidly darkened and soon more began to appear, first on the wrist and then gradually over the body in the present distribution. The left wrist still is the most severely involved area of the body. The patient is of sturdy Italian peasant stock. There is neither history of a similar eruption nor other significant fact in any known member of the family. No serum has been given at any time, and patient was successfully vacci-

* **Merlin T-R. Maynard** (Twohy Building, San Jose, California). M. D. Washington University Medical School, 1922. A. B. Leland Stanford University, 1919. Graduate study: Stanford University Medical School Skin Clinic, 1924-26. Intern Lane Hospital, 1922-23. Previous honors: Diplomate of National Board, 1923. Present hospital connections: Acting dermatologist (visiting) San Francisco Hospital; staff San Jose Hospital and O'Connor Sanitarium, San Jose. Present scientific organizations: Member Santa Clara County Medical Society, C. M. A., A. M. A. Present appointments: Clinical instructor medicine (dermatology) Stanford Medical School; acting visiting dermatologist San Francisco Hospital. Practice limited to Dermatology since March, 1926. Publications: "Warts," Better Health Magazine.

nated in childhood and not since. The patient has never had previous "hives." For two years before onset the patient had digestive symptoms consisting of nausea and flatulence after meals, and other symptoms being strongly suggestive of chronic gall bladder or appendiceal disease. Roentgen examination of the gall bladder region was negative, but a laparotomy in 1923 disclosed chronic appendicitis with adhesions, and one year later a second laparotomy was done for persistence of symptoms and many adhesions were freed. The gall bladder and other abdominal organs were considered normal. The general symptoms were somewhat abated, but the skin condition did not alter.



Adult urticaria pigmentosa. The response to stimulation is not well shown.

Photomicrograph of section from a case of adult urticaria pigmentosa. The deeper staining stellate cells are mast cells. The perivascular arrangement is apparent.

Physical Examination—The skin presents many lesions of freckle-like appearance, deep brown, round, split-pea size, rather discrete but closely placed, very few being confluent. They are slightly palpable and rather symmetrical in distribution. The greatest concentration of the lesions is on the flexures, the wrists, upper arm and above the knees, the ankles are thickly massed with spots, and the rest of the body is thickly massed with similar-appearing macules. The face, however, is apparently free, as are the palms and soles. The abdomen shows two laparotomy scars, one frankly keloidal, the other showing beginning hypertrophy. There are no scratches or other scars. The normal skin is definitely dermographic, and when the lesions are rubbed an almost instantaneous change takes place in which each lentiginous lesion rapidly swells, deepens to a purplish tint and becomes frankly urticarial. This phenomenon is exceedingly striking. The wheals persist for a short time and then subside. They are almost immediately blanched by the injection of adrenalin locally, and even the most insignificant lesion of long standing changes to an active weal on irritation.

Other abnormalities found on examination were chronic infiltration of the tonsils, the thyroid distinctly enlarged of the parenchymatous type without signs of toxicity. The abdomen is slightly tender in the region of the cecum and in the right upper quadrant.

Microscopical examination of a lesion by the lesion by the right knee, including some normal skin, shows normal squamous granular and prickle cell layers. The basal layers show a distinct pigment capping, which is considerably increased in the area of the lesion. The pappillae are normal and the vessels of the corium there are prominent. There is likewise some intercellular edema and throughout the corium there are numerous mast cells with a distinct tendency toward grouping around the vessels in the area of the lesion. The normal skin likewise shows an increase in these cells to a lesser degree, many of which show degenerative changes with a spilling of their granules into the tissue spaces.

The clinical and microscopic pictures are distinctly those of urticaria pigmentosa, a diagnosis which has been confirmed by several dermatologists who have seen the patient with me.

The most prominent factors are the mast cells and their distribution in the normal and pathological areas. There are found many degenerating mast cells with spilled granules. The mast cells are increased in the normal skin, and the epidermis itself is unchanged. The pigmentation is due to melanin and not to the mast cells as shown by the unstained sections. The distribution of the lesions with the rapid subsidence with rest or adrenalin injection, and the persistence of the pigment with the urticarial response to irritation regardless of the age of the lesions and the general dermographism, make a complete picture. The tendency to keloids is interesting.

Treatment has been corrective and directed toward relieving the gastrointestinal symptoms. The prognosis is, of course, poor, but the patient is fortunately not greatly bothered by her lesions.

The sterilization act of Virginia has been upheld by the Supreme Court of that state. According to the provisions of the law it is possible for the board of directors of the state colony for epileptics and feeble-minded to sterilize sexually any person under state custodial care who is feeble-minded or an epileptic and able to procreate his or her kind. There has been much objection to these sterilization acts, but in reality most of the arguments advanced are not worthy of very serious consideration. On the whole the medical profession is in sympathy with sterilization acts that are prepared and enforced intelligently.—J. Indiana M. A., August, 1926.